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EXAMINER	
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ART UNIT	PAPER NUMBER
2614	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/580,808	SEZAN ET AL.	
	Examiner	Art Unit	
	Annan Q Shang	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,3,5-10,12-104 and 108-118* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,3,5-10,12-104 and 108-118* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments/amendments filed 08/27/04 have been fully considered but they are not persuasive.

With respect to claims 2-9, 11-25, 27-30 and 38-57, rejected under 35 U.S.C. 102(e) as anticipated by **Sahai et al (6,594,699)**.

With respect to independent claim 2, applicant argues that Sahai does not teach "quality of encoding includes a first quality and second quality where the first quality is less than the second quality. The Examiner cites Sahai at column 3, lines 23-60, as indicating the attributes of the preference description. However, this passage in Sahai does not provide the claimed preferences description with media attributes wherein the attributes describes the quality of encoding. At line 50, quality of service is listed as one of the pieces of data sent by the client to the server but there is no media attributes that the system provides as parts of the preferences description that describes the quality of encoding of audio image or video."

In response, examiner disagrees. Besides cited column 3, lines 23-60 of the last office action, examiner further cited col. 4, lines 9-31) and indicated in the Office Action that the "multiple attributes, such as, playback frame rate, bit rate, etc., (see page 3, line 1+ of Office Action). Sahai teaches in col. 4, lines 9-12, that "client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server. Typical delivery properties chosen by the user, through a conventional graphical user interface (GUI) provided for this purpose or based on

prompts of the user can include parameters such as:..," Applicant should note that the user would have at least select from two modes, i.e., first and second mode for frame rate, likewise first and second mode for bit rate, etc., various quality of service parameters (col. 4, lines 18-24) which describes the quality of encoding, where each of this modes will indicate a first quality and a second quality and where one quality will be less than the other. Note that, the various quality of service parameters is based on content type (audio, video, image, text, etc.,). Sahai further teaches in col. 3, lines 24+, a list of client machine capabilities, such as: TV Set top, PC, lap top, etc., memory/storage speed, etc. "storage attributes" (note also col. 6, lines 9-11) and along with the list of the client capabilities, the user further chooses preferences/specifications. Hence, amended independent claim 2 and claims 3 and 5-9, using Sahai, meets all the claimed limitations, as repeated below.

With respect to independent claim 21, applicant argues that, "the claim specifies that the system encode the broadcast at one of a plurality of different qualities for storage on the storage device. The Examiner cites column 6, lines 50-52, of Sahai for support for storage device limitation. However, this paragraph from Sahai says only that the process for adapting the data stream is stored. Moreover, it is stored on the server and not the client device. Sahai teaches only transmission of data (streaming) and does not show storage of differently encoding media on a storage device."

In response, examiner disagrees. Applicant again cites column 6, lines 50-52, however, in addition to the cited column, examiner cited col. 2, lines 44-64, which teaches the server system 10 obtains client capabilities and user preferences

(discussed above with respect to claim 2) from client 12 and responds to the transfer request by streaming the data over the network 14 to the client based on the capabilities (which includes amount of storage spaces available, specifications, etc., chosen by the user) and preferences (col. 2, lines 60-64), and col. 6, lines 50-52 was cited to indicate the type of storage medium at server 10 and not the client device. Examiner, further disagrees that Sahai teaches only transmission of data and does not show storage of differently encoded media on the storage device. As discussed above the client can select between different qualities of encoding and server 10 responds based the client request and moreover the data (col. 2, lines 5-7 and SGI streaming media 'col. 6, line 53-56' which is incorporate by reference), provided on demand is video/audio which is encoded based on the type of content, audio, image, video, etc., specified by the user preferences (col. 4, lines 15-24). Hence claims 21-30, using Sahai, meets all the claimed limitations, as repeate below.

With respect to claims 38 and 49, applicant further agues that Sahai does not encode audio or video based upon its content and "no storage attributes" provided as part of the user preferences description because Sahai provides no storage for media received by the user.

In response, examiner disagrees, as discussed above with respect to claim 2, hence the rejection of claims 38 and 49, and all the dependent claims, using Sahai is proper, maintained and repeated below, as Sahai meets all the claimed limitations

With respect to claim 57, applicant argues that, "Sahai does not teach an "agent" that selects the quality of encoding based upon prior selections. Sahai teaches

encoding based only upon system capabilities that are accessed in a file on the client device (column 5, lines 7-10)" "There is only one quality in Sahai once the media player and client capabilities are known."

In response, examiner disagrees. As indicated in the office action the application program that runs on the Server 10 and client 12 is the agent, which uses a GUI to generate prompts, to enable client 12 to select the various desired parameters as discussed in claim 2. Furthermore Sahai system allows client 12 to select between at least two modes (first quality and second quality) and server 10 responds to the prompts based on prior selections by client 12. Hence the rejection of claims 57-60, using Sahai is proper, maintained and repeated below, as Sahai meets all the claimed limitations.

With respect to claims, 10, 26, 31-37 and 94-103, rejected under 35 U.S.C. 103(a) as being unpatentable over Sahai in view of **Li et al (6,543,053),** applicant further argues that Sahai does not provide "storage attributes" of the user preferences that describes the quality of encoding audio or video and the combination of Sahai in view of Li is improper.

In response, examiner disagrees. As discussed in claim 2, Sahai provides storage attributes and various quality of encoding and combining the teaching of Li true video-on-demand services including VCR-like functions such as: play, stop, pause, resume, etc., to Sahai reject claims 10, 26, 31-37 and 94-103, is proper, since both references are in the same field of endeavor, i.e., Sahai and Li system, provides video on demand services over a network to a plurality of client devices with storage

capabilities for storing the video, audio, control information, etc. Hence using Sahai in view of Li, is proper, maintained and repeated below and meets all claimed limitations.

With respect to claims 61-72, rejected under 35 U.S.C. 103 as unpatentable over Sahai in view of **Fano (6,317,718),** applicant argues that, "given the structure of Sahai, it is not possible to provide a time delivery preference in Sahai's system. The delivery process of Sahai is initial by accessing a URL. This is manual operation initiated by the user. Sahai requires the Internet for establishing a communications link between the server and the client and teaches that the system is triggered by the user clicking a URL in his browser. By contrast, Fano is a video system that does not use the Internet but uses a dedicated network with a user at one end and broadcaster at the other. The two systems are so different that time attributes feature of Fano could not be used in Sahai.

In response, examiner disagrees. Sahai disclosures teaches client devices, such as a TV set top box (col. 3, lines 25-27 and col. 4, lines 57-63) and provides services, which includes video on demand services (col. 2, lines 5-7 and col. 4, lines 15-24) which involves scheduled time and further suggest that the invention is useful for other types networks, and any client server interaction in a distributed system, where the server has to be aware of the client capabilities and user preferences, when the server is servicing the request and also for video conferencing (col. 7, lines 18-36) and not just URL as indicated by applicant. Fano teaches a held-held wireless device with Internet Protocol capability, which can be used wirelessly or via a telephone to access the Internet (figs. 9, 10 col. 27, lines 11-35 and col. 29, lines 45-64) and information gathering agents that stores user specific information and preferences, including time delivery preferences

(fig. 17 and col. 33, lines 7-27). The two references are in the same field of endeavor, Sahai teaches using Internet, Intranet and other types of communication medium to transmit video, audio, text, etc., to various types of client devices and Fano teaches using Internet and wireless medium to transmit video, audio, text, etc., to clients. Hence the combination of Sahai in view of Fano, is proper, maintained and repeated below and meets all claimed limitations.

With respect to claims 73-93, rejected as obvious over Sahai in view of **Barrett et al (6,611,876)**, applicant argues that Barret does not show a layer attribute in a user preferences description and the combination of Sahai in view of Barrett is improper.

In response, examiner disagrees. Sahai teaches user preferences description with respect to audio, video, text, etc., as discussed above with respect to claim 2 and Barrett teaches encoding of intermediate content with respect to user preference. Besides the cited column 6, lines 1-27 and 43-58 which describes the GUI interface that may be used to implement the administration functionally, columns 3, lines 57-65 and column 4, lines 35-49 was first cited by examiner in the Office Action. Barrett teaches in the background of the reference that Intermediaries or Web intermediaries are enhance data that can be positioned anywhere along a data stream (col. 1, lines 15-36) and since the claimed required supplemental data auxiliary to at least one of audio and video the examiner incorporate the teaching of Barrett user preference data with respect to encoding of HTML and XML documents (as recited in claim 74 as layers of...), to the teaching of user preferences to encoding of primary data as taught by Sahai. Hence the

combination of Sahai in view of Barrett, is proper, maintained and repeated below and meets all claimed limitations.

With respect to claims 80 and 89, applicant further argues that Sahai does not teach a storage for receiving audio or video, how this has been discussed above with respect to claim 49, and the claimed layers of supplemental data is discussed with respect to claim 73. Hence the combination of Sahai in view of Barrett, is proper, maintained and repeated below and meets all claimed limitations.

With respect to claims 104-107, rejected as unpatentable over Sahai in view of **Huang et al (6,593,936),** applicant argues that the amended claims overcomes Sahai in view of Huang.

In response examiner disagrees. Sahai teaches all the claim limitations of user preference description and capabilities, as previously discussed with respect to claim 2 and the combinations of Sahai in view of Huang still reads on the amended claim limitations, as maintained and repeated below.

With respect to claims 108-118, rejected as obvious in view of Sahai and **Kanevsky et al (6,426,761)** applicant further argues the combination of Sahai and Kanevsky and also argues of no motivation to combine.

In response examiner disagrees. Sahai teaches all the claim limitations of user preference description and capabilities as previously discussed with respect to claim 2 and Sahai in view of Kanevsky, is proper maintained and repeated below and meets all claimed limitations.

Applicant's arguments/amendments have been fully considered but they are not persuasive, for the reasons discussed above, hence Sahai and the various 103 combination using Sahai in view of the various references, meets all claimed limitation, as repeated below. This Office Action is made Final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2, 3, 5-9, 12-25, 27-30 and 38-57, are rejected under 35 U.S.C. 102(e) as being anticipated by **Sahai et al (6,594,699).**

As to claims 2 and 3, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication

Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video"

Sahai teaches in col. 4, lines 9-12, that "client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server. Typical delivery properties chosen by the user, through a conventional graphical user interface (GUI) provided for this purpose or based on prompts of the user can include parameters such as:.," note that the user would have at least select from two modes, i.e., first and second mode for frame rate, likewise first and second mode for bit rate, etc., various quality of service parameters (col. 4, lines 18-24) which

describes the quality of encoding, where each of this modes will indicate a first quality and a second quality and where one quality will be less than the other. Note that, the various quality of service parameters is based on content type (audio, video, image, text, etc.,). Sahai further teaches in col. 3, lines 24+, a list of client machine capabilities, such as: TV Set top, PC, lap top, etc., memory/storage speed, etc. "storage attributes" (note also col. 6, lines 9-11) and along with the list of the client capabilities, the user further chooses preferences/specifications. Hence, amended independent claim 2 and claims 3 and 5-9, using Sahai, meets all the claimed limitations, as repeated below.

As to claims 5-6, Sahai further teaches a first quality and second quality of encoding where the first is less than the second (col. 3, lines 50-60 and col. 4, lines 17-31), note that Server 10 can encode in MPEG1, MPEG2, MJPEG, etc., depending on Client 12 C/P, where one encoding scheme is less than the other and further where the storage results in at least storing less bytes of the first quality encoding of the audio video than the second quality of encoding using digital compression technique (col. 6, lines 12-49).

As to claims 7 and 8, Sahai further discloses selecting the quality of encoding base upon the storage for at least the audio and video and automatically performed by the Server 10 (col. 3, lines 23-31, lines 50-60 and col. 4, lines 17-40).

As to claim 9, Sahai further discloses where the selecting is prompted to the user of the system for selection (col. 5, lines 17-31).

As to claims 12-13, Sahai further discloses selecting either the first quality and the second quality based upon the type of content to the at least the audio and the

video (col. 5, lines 35-46 and col. 6, lines 12-49), note further that real time sports programming and nature programming area automatically encoded by MPEG1 or MPEG2 formats depending on the Clients C/P information.

As to claims 14-19, Sahai further discloses a method where the system automatically selects first and second quality based upon attributes of preferences description, system description, a program preferences description, predefined relationships between a plurality of attributes of the preference descriptions, a program preference descriptions, system preference descriptions (col. 3, lines 23-60, col. 4, lines 9-40), note that Server 10 upon receiving the various play request and Client C/P automatically, makes flexible and accurate decisions about the Client concerning resource allocation for streaming of data and the use of appropriate format type (MPEG1, MPEG2, etc.,) and network traffic to stream media data according to C/P (col. 6, lines 12-52).

As to claim 20, Sahai further discloses a method where Server 10, which inherent includes an agent that selects the first quality and second quality, based upon prior selections of the first quality (col. 4, lines 9-40 and col. 5, lines 1-21).

As to claim 21, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose a system for use with at least one of broadcast of audio and video comprising a plurality of frames comprising:

· the claimed "system for receiving said broadcast of at least one of audio and video..." is met by Server 10 (fig. 1, col. 2, lines 44-64), note that Server 10 receives

broadcast of audio and video from various servers on the network 14 and stores the received audio and video data, in a storage media, such as a disk (col. 6, lines 50-52); and further receives and stores each Client 12 capabilities and preferences (C/P) (col. 3, lines 5-25 and col. 4, lines 9-14); and selectively encodes at least one of different qualities, MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) of the received broadcast of at least the audio and video for storage on Storage Media, such as a disk to enable a Client to access and retrieve the media data based on the Client C/P (col. 6, lines 12-49).

Claim 22 is met as previously discussed with respect to claim 4.

Claim 23 is met as previously discussed with respect to claim 7.

Claim 24 is met as previously discussed with respect to claim 8.

Claim 25 is met as previously discussed with respect to claim 9.

Claim 27 is met as previously discussed with respect to claim 11.

Claim 28 is met as previously discussed with respect to claim 14.

Claim 29 is met as previously discussed with respect to claim 5.

Claim 30 is met as previously discussed with respect to claim 20.

As to claim 38, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 2; the claimed "providing a storage attribute of the preferences description..." is met by Storage Media or Disk of Server 10 (col. 6, lines 50-52) which stores Client C/P, and where Server 10 encodes the audio and video based upon the content of at least one of audio and video.

Claim 39 is met as previously discussed with respect to claim 11.

Claims 40-42, are met as previously discussed with respect to claim 11-13.

Claim 43 is met as previously discussed with respect to claim 11.

Claim 44 is met as previously discussed with respect to claim 14.

Claim 45 is met as previously discussed with respect to claim 16.

Claim 46 is met as previously discussed with respect to claim 15.

Claim 47 is met as previously discussed with respect to claim 11.

Claim 48 is met as previously discussed with respect to claim 8.

As to claim 49, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 2; the claimed "providing a storage attribute of the preferences description..." is met by Storage Media or Disk of Server 10 (col. 6, lines 50-52) which stores Client C/P, and where Server 10 encodes the audio and video based upon the combination of at least capabilities and the preferences description (col. 6, lines 12-49).

Claim 50 is met as previously discussed with respect to claim 11.

Claim 51 is met as previously discussed with respect to claim 7.

Claim 52 is met as previously discussed with respect to claim 11.

Claim 53 is met as previously discussed with respect to claim 14.

Claim 54 is met as previously discussed with respect to claim 15.

Claim 55 is met as previously discussed with respect to claim 20.

Claim 56 is met as previously discussed with respect to claim 8.

Claim 57, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 2; the claimed "providing a storage attribute of

the preferences description..." is met by Storage Media or Disk of Server 10 (col. 6, lines 50-52) which stores Client C/P, and where Server 10 encodes the audio and video based application program "an agent of the system" that selects the first quality and second quality based upon prior selections of either the first quality or second quality, MPEG1, MPEG2, MJPEG, etc., (fig. 3, col. 5, lines 1-26 and col. 6, lines 12-49).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10, 26, 31-37 and 94-103, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Li et al (6,543,053)**

As to claims 10 and 26, Sahai teaches all the claimed limitation as previously discussed with respect to claim 5 and 10 respectively, and further disclose viewing and listening to portion of at least one of the audio and video and selecting either a first quality and second quality for storing portion of video and audio on a Storage Media.

Sahai fails to explicitly teach pausing the viewing and listening, storing the portion subsequent to the location that the portion was paused, resuming the viewing and listening of the portion at the location that the portion was paused.

However, note the **Li et al** reference figure 2, disclose a data distribution system and protocol for interactive information services over a network with true video-on-

demand (VOD) services, accessing any video at anytime and performing any VCR-like functions, including play, stop, pause, resume, fast-forward, rewind, etc., and random access (fig. 2 and col. 8, line 57-col. 9, line 13).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Li into the system of Sahai to monitor and retrieve data relating to the Client's pausing, resuming, etc., of audio and video data, and transmit the audio and video data, from the interrupted position, thereby enabling the Client to have full control of the audio and video data.

As to claims 31-33, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate

of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31); and further teaches a Server 10, which includes Storage Media for storing each Client 12 capabilities and preferences (col. 6, lines 50-52) and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video"

Sahai fails to explicitly teach a system that pauses at least one of listening and viewing of the audio and video.

However, note the **Li et al** reference figure 2, disclose a data distribution system and protocol for interactive information services over a network with true video-on-demand (VOD) services, accessing any video at anytime and performing any VCR-like functions, including play, stop, pause, resume, fast-forward, rewind, etc., and random access and storing the various VCR-like function in a RAM (fig. 2, col. 6, lines 19-30, col. 8, line 57-col. 9, line 13) and further teaches time interval for jump forward and jump backward "skipping portion of the presentation where the Server can automatically determined the various VCR-like function and transmits appropriate audio program, video program or multimedia to the STB (col. 6, lines 7-15 and col. 9, lines 14-27).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Li into the system of Sahai to monitor and

retrieve data relating to the Client's pausing, resuming, etc., of audio and video data, and transmit the audio and video data, from the interrupted position, thereby enabling the Client to have full control of the audio and video data.

Claim 34 is met as previously discussed with respect to claim 5.

Claim 35 is met as previously discussed with respect to claim 5.

Claim 36 is met as previously discussed with respect to claim 8.

Claim 37 is met as previously discussed with respect to claim 7.

As to claim 94, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 31.

Claims 95-97, are met as previously discussed with respect to claim 31.

As to claims 98-100, Sahai further discloses selecting based upon other attributes of preferences descriptions, which has been discussed with respect to claims 14-16, but fails to explicitly teach selecting based upon, forward speed, reserve speed and time interval forward, however, the claimed limitation is met as previously discussed with respect to claim 31.

As to claim 101-103, Sahai further discloses automatically determined by the system for at least one audio and video based upon the system monitoring previous selections for other respective audio and video (col. 5, lines 1-26 and col. 6, lines 12-42 and lines 57-67), but fails to explicitly teach automatically determined based upon, forward speed, reserve speed and time interval forward, however, the claimed limitation is met as previously discussed with respect to claim 31.

6. Claims 61-72, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Fano (6,317,718).**

As to claims 61 and 62, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) and further discloses where Server 10, stores each Client 12 C/P and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the

audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31).

Sahai fails to explicitly teach providing a time attribute of the preferences description describing at least one of: a first time to start obtaining the at least one of audio and video prior to the scheduled time of the at least one of audio and video and a second time to end obtaining the at least one of audio and video after the schedule time of the at least one of audio and video.

However, note **Fano** reference figure 17, discloses and information gathering agents that stores user specific information and preferences, including time delivery preferences where the schedule time is the time period for media data "audio program and a video program" (fig. 18, col. 33, line 64-col. 34, line 23 and col. 38, lines 39-56).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fano into the system of Sahai to include time delivery preferences to enable the user to schedule and receive the requested information at the appropriate time.

As to claims 63 and 64, Sahai further teaches streaming multimedia data, based upon the content and type of the audio program and video program (col. 6, lines 12-49), but fails to explicitly teach a first time and second time is selection based upon the content of the an audio program and a video program.

However, note **Fano** reference figure 17, discloses and information gathering agents that stores user specific information and preferences, including time delivery

preferences where the schedule time is the time period for media data "audio program and a video program" (fig. 18, col. 33, line 64-col. 34, line 23 and col. 38, lines 39-56).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fano into the system of Sahai to include a selecting times based on content to enable the service provider to monitor time with respect to content for appropriate delivery of specific contents for the requested user.

Claim 65 is met as previously discussed with respect to claim 11.

Claim 66 is met as previously discussed with respect to claim 11.

Claim 67 is met as previously discussed with respect to claim 63.

Claim 68 is met as previously discussed with respect to claim 63.

Claims 69-72, are met as previously discussed with respect to claim 12-13.

7. Claims 73-93, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Barrett et al (6,611,876).**

As to claims 73 and 74, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication

Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) and further discloses where Server 10, stores each Client 12 C/P and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31).

Sahai fails to explicitly teach providing a time attribute of the preferences indicating the number of layers of supplemental data auxiliary to the least one of audio and video.

However, note **Barrett et al** reference figure 4, disclose encoding of intermediate content "Web Intermediaries" (WBI or webby) with respect to user preference including text, image, type of desired source of compression, how images are disposed, preferred image scaling, etc., (col. 3, lines 57-65 and col. 4, lines 35-49), where various transcoders dynamically scales layers of HTML, XML, etc., to meet a Client's

preferences or device capabilities, including available storage (figs. 4a, 4b, col. 6, lines 1-27 and lines 43-58).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Barrett into the system of Sahai to encoded appropriate number if layers of supplemental data for the media data or audio and video to transmits to the Client based on the Client preferences and capabilities, to enable the Client to retrieve the requested information accordingly.

Sahai further discloses a method comprising retrieving multimedia data prior to viewing the multimedia data, but fails to teach supplemental data, which has been discussed with respect to claim 73.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Barrett into the system of Sahai to enable the user to interact with the supplement data to enable the server to retrieve Client capabilities and preferences information relating to the supplemental data to aid in streaming the appropriate supplemental data to the client based on the Client's preferences and device capabilities.

As to claim 75, Sahai further discloses retrieving the audio and video data prior to viewing and listening of the video and audio data, but fails to explicitly teach supplemental data.

However **Barrett** discloses retrieving supplemental data, as previously discussed with respect to claim 73.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Barrett into the system of Sahai to provide supplemental data, as additional information relating to the audio and video data, to enable the Client to listen and view and retrieve the audio and video data as desired.

Claim 76, is met as previously discussed with respect to claim 73.

As to claim 77, Sahai teaches where the Server 10, includes a disk storage media which ceases to retrieve any data from Clients (col. 6, lines 50-52), but fails to explicitly teach supplemental data.

However **Barrett** discloses retrieving supplemental data, as previously discussed with respect to claim 73.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Barrett into the system of Sahai to provide supplemental data as additional information to the audio and video data.

As to claims 78 and 79, Sahai further discloses determined the number of layers of multimedia data or video and audio to encode and transmit to Client based on Client C/P, including storage, but fails to explicitly teach supplemental data, which has been discussed with respect to claim 73.

As to claim 80-81, the claimed system is composed of the same structural elements that were discussed in the rejection of claim 73-74;

Claim 82, is met as previously discussed with respect to claim 75.

Claim 83, is met as previously discussed with respect to claim 73.

Claim 84, is met as previously discussed with respect to claim 77.

Claim 85 and 86, is met as previously discussed with respect to claim 78 and 79.

As to claims 87 and 88, Sahai further discloses selecting multimedia or media data, based on the content and the type of media, as previously discussed with respect to claim 11, but fails to explicitly teach selecting number of layers of supplemental data.

However, Barrett teaches selecting and encoding layers of HTML and XML data based on user preference or device, as previously discussed with respect to claim 73.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Barrett into the system of Sahai to select supplemental data based on content and type, to enable the encoding and scaling appropriate content and type of data to Clients based on C/P.

As to claim 89 and 90, the claimed system is composed of the same structural elements that were discussed in the rejection of claim 73-74.

Claim 91, is met as previously discussed with respect to claim 75.

Claim 92, is met as previously discussed with respect to claim 73.

Claim 93, is met as previously discussed with respect to claim 77.

8. Claims 104, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Huang et al (6,593,936).**

As to claims 104-107, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) and further discloses where Server 10, stores each Client 12 C/P and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31).

Sahai fail to explicitly teach user's preferences with respect to audio representation and video representation.

However, note **Huang et al** reference figures 1 and 9, disclose synthetic audiovisual description scheme where metadata is used as data representation for

describing an audio and a video data, including music, real audio, stereo, letterbox screen, etc, (col. 5, line 62-col. 6, line 14 and col. 8, lines 1-42).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Huang into the system of Sahai to enable the user to provide preferences with respect to audio and video representation to enable the easy retrieval of requested media data or content at the search engine or server.

9. Claims 108-118, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Kanevsky et al (6,426,761).**

As to claims 108-111 and 118, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the

preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) and further discloses where Server 10, stores each Client 12 C/P and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31).

Sahai fails to explicitly teach providing a creation attribute of the preference description describing the creation date of at least one of audio and video.

However, note Kanevsky et al reference figures 1 and 5, disclose an information presentation system for a graphical user interface (GUI) that generates a cluster of items for display and includes creation attributes, including creation date of the information being presented (col. 6, line 52-col. 7, line 14, col. 11, lines 34-65 and col. 12, lines 36-53), and further teaches where video, audio, multimedia, etc., are also implemented (col. 3, lines 43-48 and col. 13, lines 12-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Kanevsky into the system of Sahai to provide creation attributes of preferences describing creation date of audio and video to indicate to the server update or changes with respect to the Client's preferences and capabilities; thereby enabling the server to select and streaming appropriate video and audio to the Client.

As to claim 112, Sahai further discloses storing selected programs on Storage Media (col. 6, lines 50-52).

10. Claims 113-117, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Kanevsky et al (6,426,761)** as applied to claims 112 above, and further in view of **Gabbe et al (5,550,965).**

As to claims 113-117, Sahai as modified by Kanevsky fails to explicitly teach selecting among a plurality of stored episodes of the program and limited to a desired number of episodes.

However, note the **Gabbe et al** reference discloses method and system for operating a data processor to index primary data for one or more users in real time with iconic table of contents where a plurality of video data, audio data, event data or meta data are indexed form an episode data to enable the user to interact to retrieve episodes as desired (col. 2, line 65-col. 3, line 3 and line 25-45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Gabbe into the system of Sahai as modified by Kanevsky to provide various episode of audio and video of the same program to enable the user to access parts or segments of the program as desired.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free).**

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